

Supplementary Table 1. Training data for developing the support vector machine (SVM). To generate these data points, we attached pop-up satellite archival tags (PSATs) to known living and dead sturgeon in 2 separate trials. In the first trial, we attached PSATs to 3 living, captive green sturgeon (*Acipenser medirostris*) (UC Davis #1–3) held for 7.5 h in a 1.5-m-deep circular tank with a 4-m diameter at the University of California, Davis, in 2015. In the second trial, we attached a PSAT to a dead white sturgeon (*A. transmontanus*) (104 cm FL) in the Pacific Ocean for 96 h (WS #1) in 2015. We used these accelerometer readings to train the SVM and to classify individuals on the basis of data patterns into 1 of 2 states: alive or dead.

<b>Alive</b>	<b>Number of PSAT data points</b>	<b>Dead</b>	<b>Number of PSAT data points</b>
UC Davis #1	97	WS #1	1392
UC Davis #2	96		
UC Davis #3	91		
<b>Total</b>	<b>284</b>	<b>Total</b>	<b>1392</b>
		<b>Total</b>	<b>1676</b>